UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF COMMERCIAL FISHERIES

CALIFORNIA FISHERY MARKET NEWS MONTHLY SUMMARY

July 1966

PART II–Fishing Information*

Sea-surface temperatures, fishing and research information of interest to the West Coast tuna-fishing industry and marine scientists

CONTENTS

	Page
Albacore Bypass Southern California	1
Sea Surface Temperature Charts, Eastern Pacific Ocean, July 1966	4

Bureau of Commercial Fisheries
Tuna Resources Laboratory
P. O. Box 271
La Jolla, California 92038

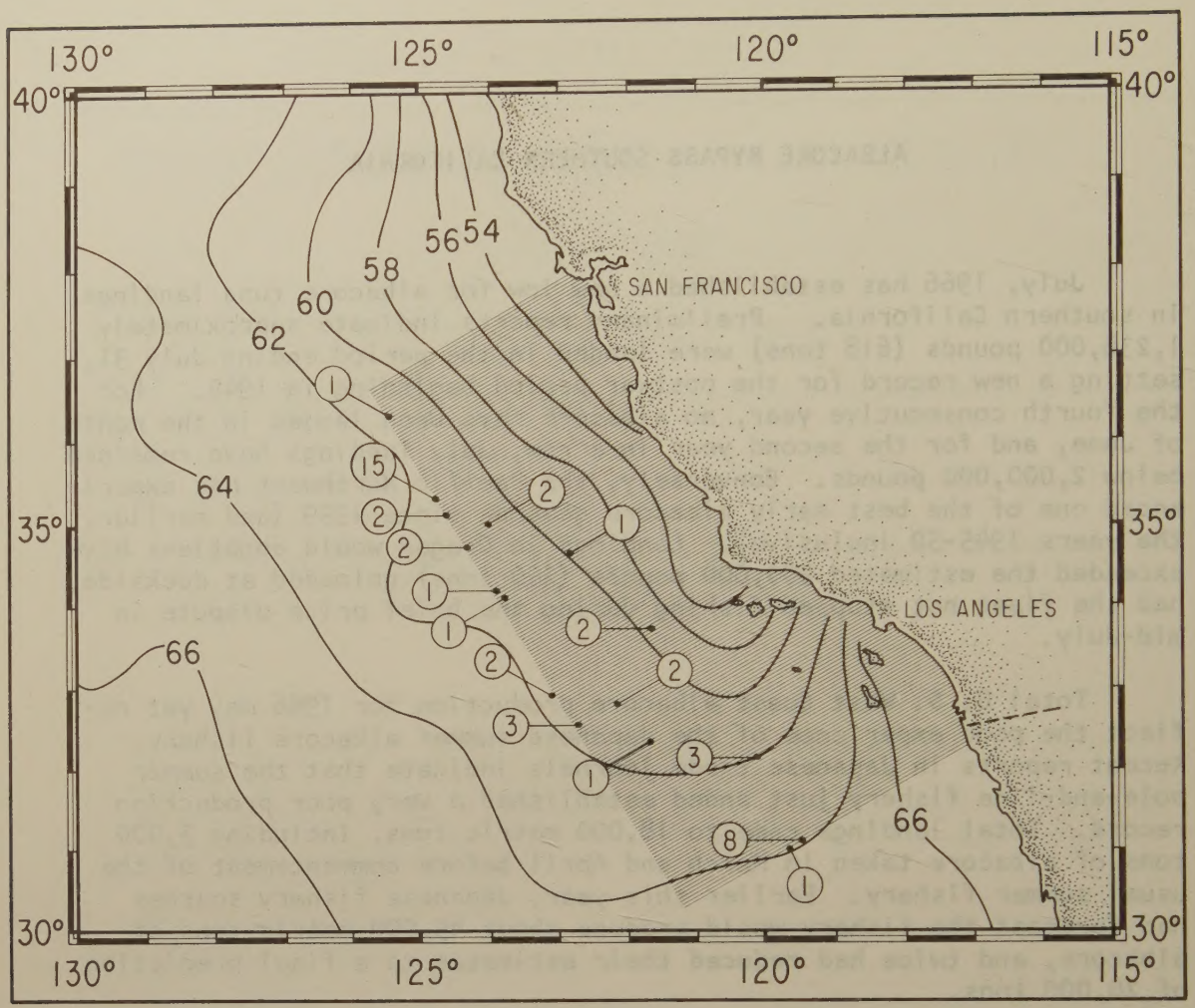
*Part 1 - "Fishery Products Production and Market Data" is issued by the Bureau of Commercial Fisheries, Market News Service, Post Office Building, San Pedro, California

ALBACORE BYPASS SOUTHERN CALIFORNIA

July, 1966 has established a new low for albacore tuna landings in southern California. Preliminary reports indicate approximately 1,236,000 pounds (618 tons) were landed in the period ending July 31, setting a new record for the postwar period beginning in 1945. For the fourth consecutive year, no albacore have been landed in the month of June, and for the second year in a row, July landings have remained below 2,000,000 pounds. Conversely, the Pacific Northwest has experienced one of the best early albacore seasons since 1959 (and earlier, the years 1945-50 inclusive). Landings in Oregon would doubtless have exceeded the estimated 500,000 pounds (250 tons) unloaded at dockside, had the fleet not stopped fishing during the brief price dispute in mid-July.

Total U. S. West Coast albacore production for 1966 may yet reflect the poor experience of the Japanese summer albacore fishery. Recent reports in Japanese trade journals indicate that the summer pole-and-line fishery just ended established a very poor production record. Total landings came to 18,000 metric tons, including 3,000 tons of albacore taken in March and April before commencement of the usual summer fishery. Earlier this year, Japanese fishery sources had forecast the fishery would produce about 45,000 metric tons of albacore, and twice had reduced their estimates to a final prediction of 20,000 tons.

Our Tuna Forecasting staff has been observing the rapid offshore warmup off northern California and Oregon since it began in mid-April, and earlier had forecast an albacore fishery in the Pacific Northwest commencing in late July. To test our prediction, we placed a technician aboard the Bureau of Commercial Fisheries R/V David Starr Jordan to troll for albacore while on her regular Marine Life Research anchovy-sardine surveys for the BCF California Current Resources Laboratory. The plan was to troll for albacore at 8 knots while underway on the standard grid pattern between stations (spaced at 20-mile intervals on lines 40 miles apart) extending from San Francisco Bay to Cape Colnett, Baja California, whenever surface water temperatures of 60° F. or warmer were observed. Jordan first encountered albacore on July 11, off San Francisco, and subsequently proceeded to take 47 fish when trolling in daylight hours on all grid lines occupied, a distance of 480 miles (see shaded area in illustration). The fish were found to be widely scattered, and ranged from 7.6 to 24.3 pounds. Only one apparently good concentration of fish was located at 35°24' N., 124°52' W., where Jordan took 15 albacore in a span of 30 minutes.



Albacore catches by BCF R/V David Starr Jordan superimposed on July 16-31, 1966 sea surface isotherm field. Shaded area denotes survey area grid pattern covered; numbers of albacore caught are in circles; sea temperatures are in °F. (California Current Resources MLR Survey 6607.)

Almost concurrently with Jordan's activities, the fishing vessel Sunrise, under charter to the Fish Commission of Oregon on a preseason albacore survey commencing July 1, reported taking 70 albacore on July 8 along a 30-mile track extending southward from 43°00' N., 127°00' W. (about 120 miles west of Cape Blanco). Water temperatures there were 59 to 60° F.

Oregon fishing vessels were alerted almost immediately after Sunrise's catch, and news of Jordan's catches served to stimulate additional scouting effort to the north by the California albacore fleet. Consequently, by the third week of the month, almost all boats had put to sea and had found some "scratch" fishing. To date, the southern California fishery has subsisted primarily on fish in the 18 to 25 pound

size class. Live bait-boats have fared reasonably well by working the inshore edge of the 66 to 68° F. thermal zone south of Point Conception on widely scattered, small schools (see Figure 1). Albacore have been taken by sportfishers in an area 40 to 80 miles to the southwest of Pt. Loma off San Diego, but by and large, the major fishing activity has been concentrated well offshore.

Jig fishing on 12 to 15 pound fish has been virtually unproductive in southern California waters. Reports from personnel of the Fish Commission of Oregon indicate good representation in the landings there of 12 to 15 pound fish, however. A few 18 to 25 pound fish have been taken off Coos Bay.

Sportfishing for albacore in southern California waters will probably be relatively short-lived this season. Continued warming of the surface layer east of a line extending from Point Conception to Guadalupe Island, coupled with light onshore winds (and consequently, reduced upwelling and turbulent mixing) are expected to cause the albacore to move offshore and to the north. To date, partyboats have logged an estimated 25,000 to 28,000 albacore from the San Diego area alone; lesser numbers have been taken by Orange and Los Angeles County boats. Thus, the 1966 sport season appears to be developing into a below-average albacore year as normal midsummer heating in August brings sea temperatures above 70 to 72° F. in areas easily reached by the boats. Persons willing to take rides up to 100 miles out will still find albacore, but others may do better to concentrate on the warm water areas inshore and try for yellowfin, skipjack, marlin and dolphinfish.

Glenn A. Flittner
Chief, Tuna Forecasting Program
August 4, 1966

SEA SURFACE TEMPERATURE CHARTS, EASTERN PACIFIC OCEAN

JULY 1966

Acknowledgments

The following organizations and stations contributed data for the July 1966 charts:

U.S. Bureau of Commercial Fisheries Exploratory Fishing and Gear Research Base, Seattle, Washington
U.S. Bureau of Commercial Fisheries Biological Laboratories, La Jolla, California; Honolulu, Hawaii; and Seattle, Washington
U.S. Naval Communication Station Balboa, Fort Amador, Canal Zone
U.S. Naval Weather Service, Fleet Numerical Weather Facility, Monterey, California
U.S. Weather Bureau Port Meteorological Office, Cristobal, Canal Zone
U.S. Weather Bureau, San Diego, California
Chimbote, Culebras, Supe and Ilo, Peru by G. Broadhead of Van Camp Sea Food Company, Long Beach, California
Hopkins Marine Station, Pacific Grove, California by J. P. Balesteri
Instituto Hidrografico de La Armada, Valparaiso, Chile by M. Arancibia aboard B. E. Esmeralda
Inter-American Geodetic Survey by David Ortega at Manzanillo, Mexico; Rene Cortes at Salina Cruz, Mexico; L. A. Peren at Pt. Armuelles, Panama; V. E. Castillo at Tumaco, Colombia; S. Valenzuela at La Libertad, Ecuador; C. Arroyo, E. Guerrero and L. Meza at Talara, Peru; J. Cardenas at San Juan, Peru
Inter-American Tropical Tuna Commission, La Jolla and Terminal Island, California
Kelco Company, San Diego, California
Oregon Fish Commission, Sunrise
Pacific Oceanographic Group, Nanaimo, British Columbia, by H. J. Hollister from observations by T. Collins at Quatsino Lightstation; W. R. Raithby at Cape St. James Light; O. A. Edwards at Amphitrite Point Light; G. C. Wilkes at Langara Island Light
Scripps Institution of Oceanography, La Jolla, California by Margaret Robinson and Hans Klein
W. R. Grace and Company, New York, New York by Dr. I. William Lane
Ships Royal Pacific, Californian, Monsoon and West Point

Charts

Figure 1.--Mean sea surface temperatures (°F) derived from approximately 8000 observations. Squares show temperatures at weather ship stations. Numerals on shore are temperatures at coastal and lightship stations.

Figure 2.--Deviation of sea surface temperatures (°F) from long term charts of H.O. 225. Hatched areas are colder in 1966.

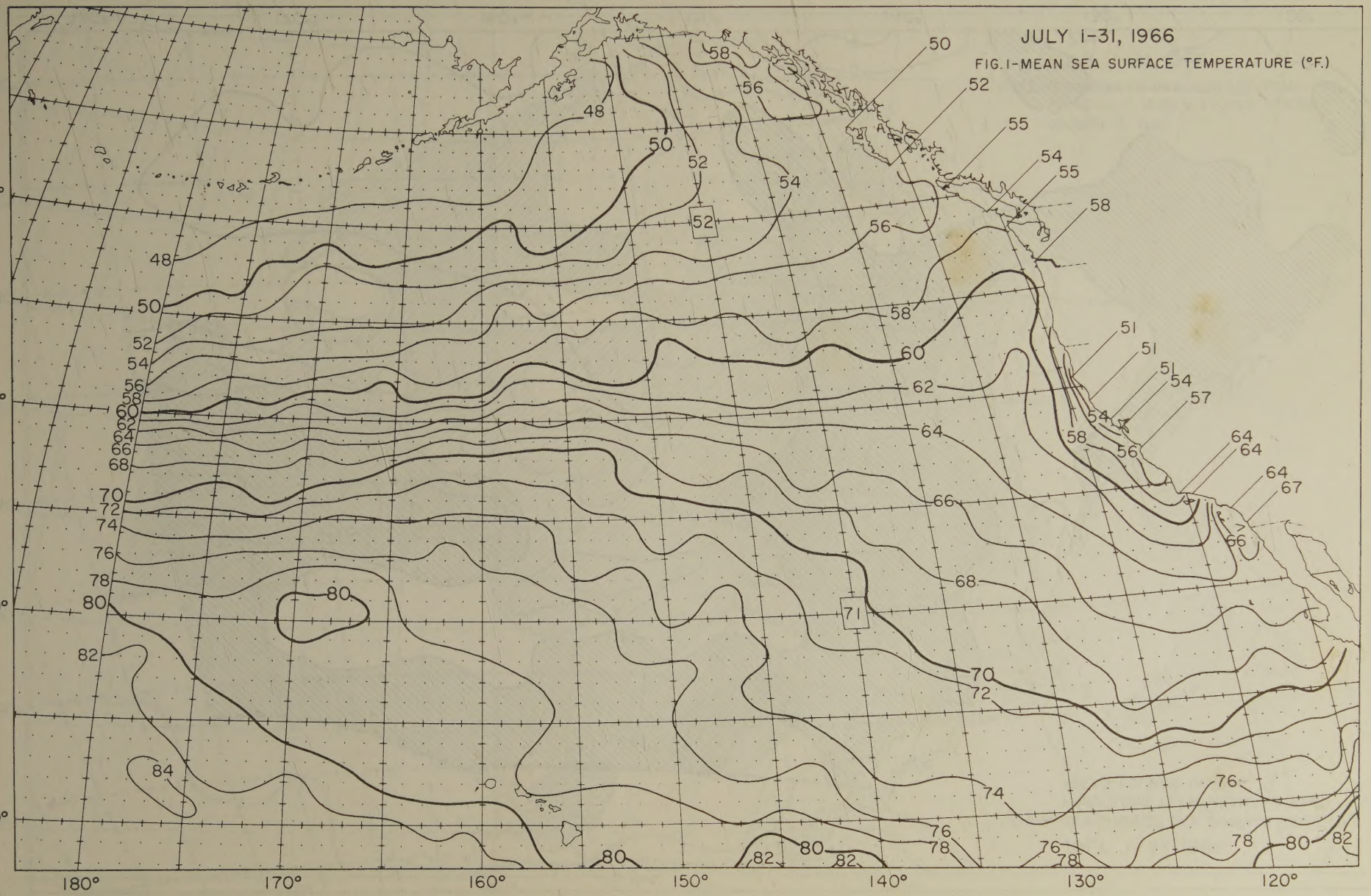
Figure 3.--Deviation of sea surface temperatures (°F) from those of July 1965. Hatched areas are colder in 1966.

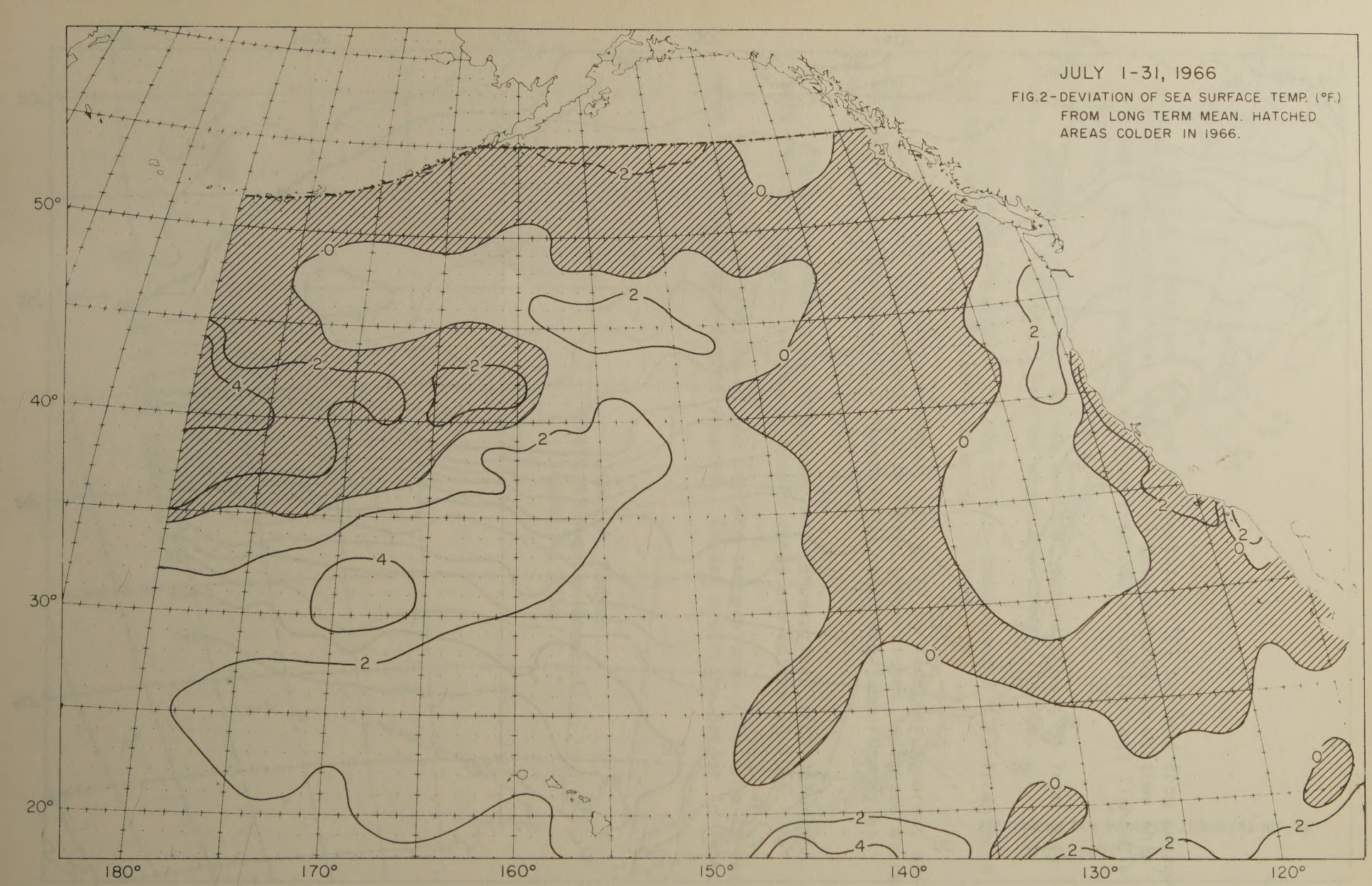
Figure 4.--Sea surface temperatures (°F) by 1-degree squares, approximately 2000 observations. Line under temperatures indicates average of two or more observations. Numerals on shore are temperatures at coastal stations.

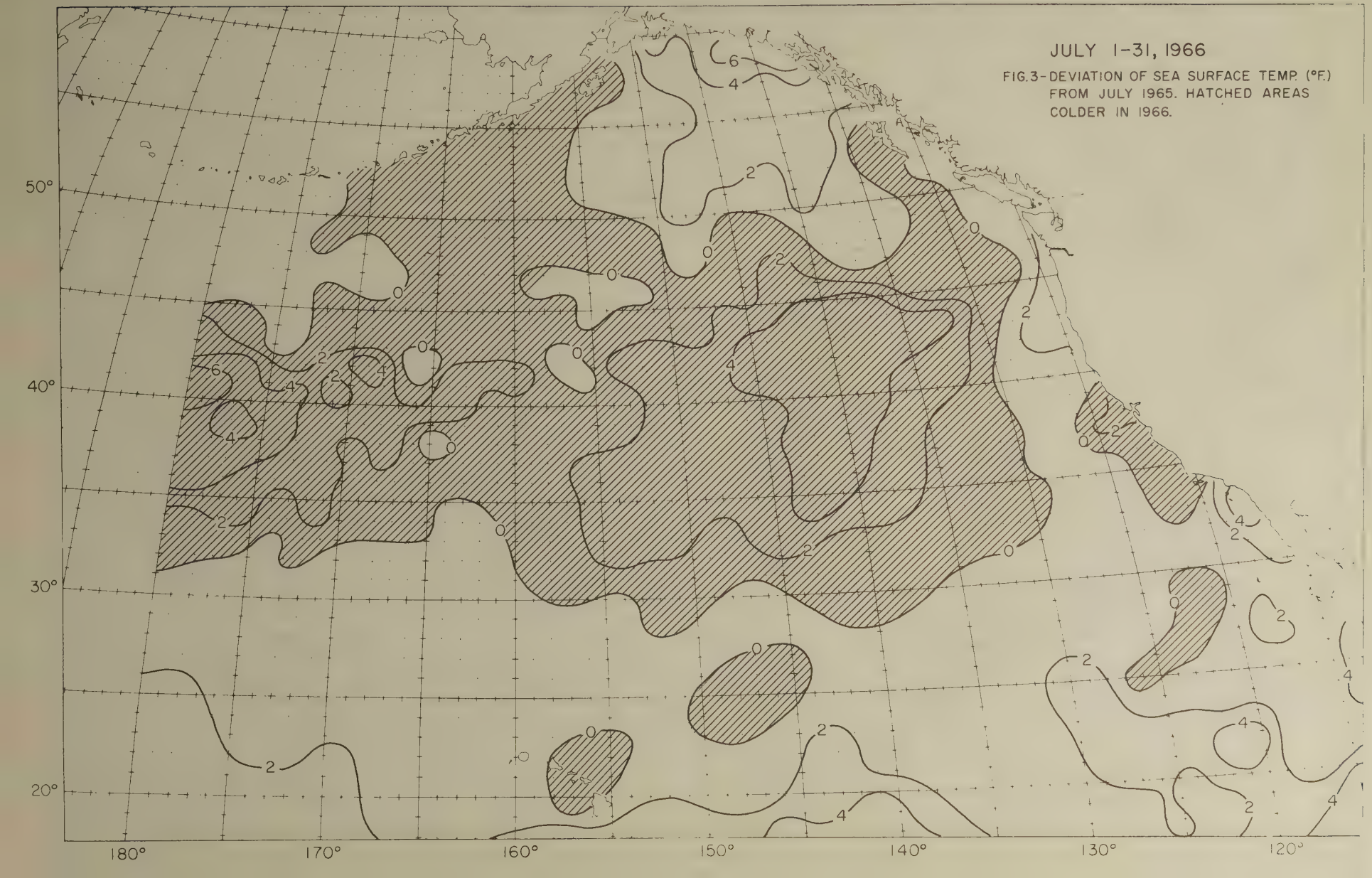
Figure 5.--Deviation of sea surface temperatures (°F) July 1966-July 1965 by 1-degree squares. Shaded areas are colder in 1966.

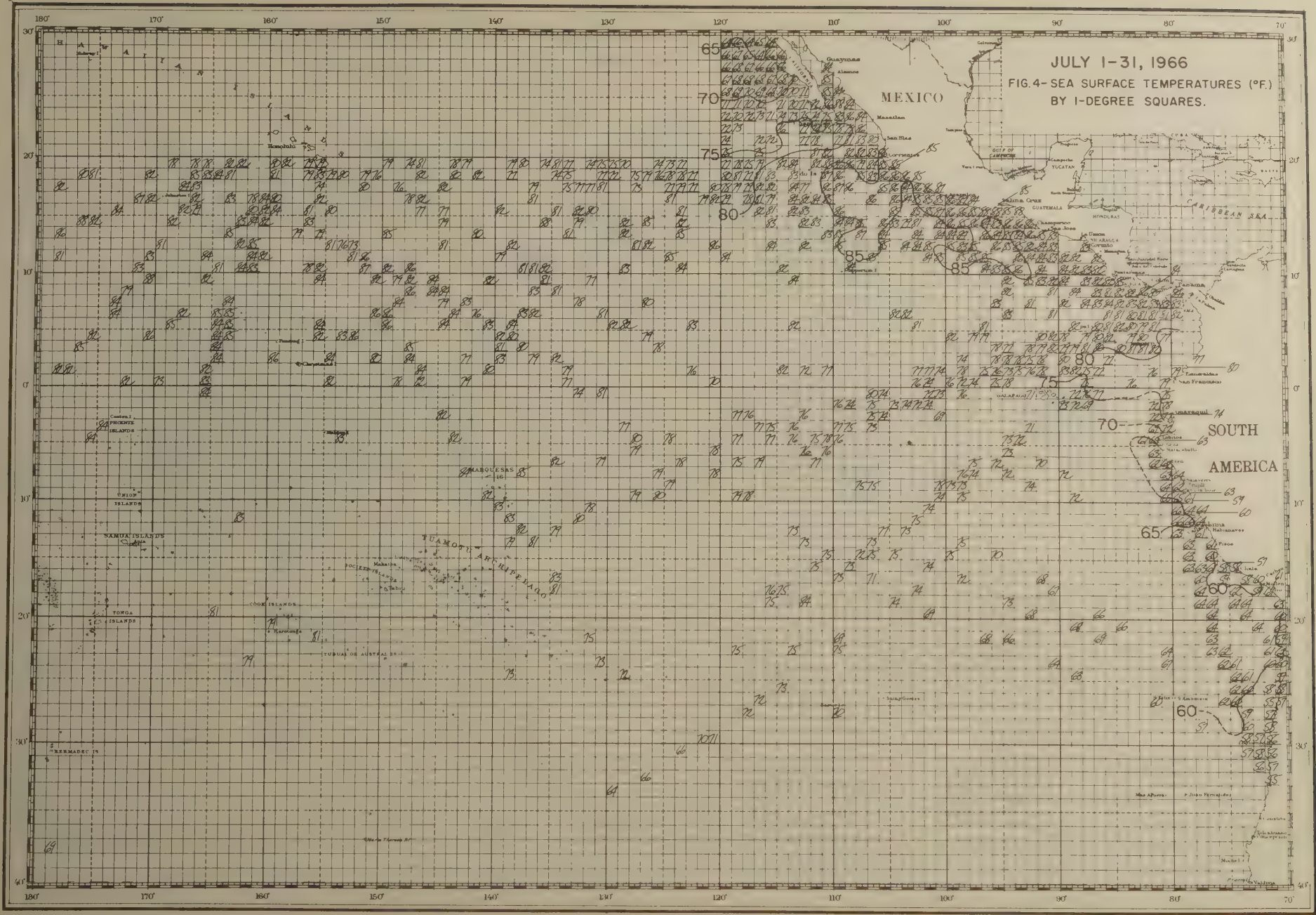
Figure 6.--Deviation of sea surface temperatures (°F) from 12-year mean (1947-1958) by 2-degree squares. Shaded areas are colder in 1966.

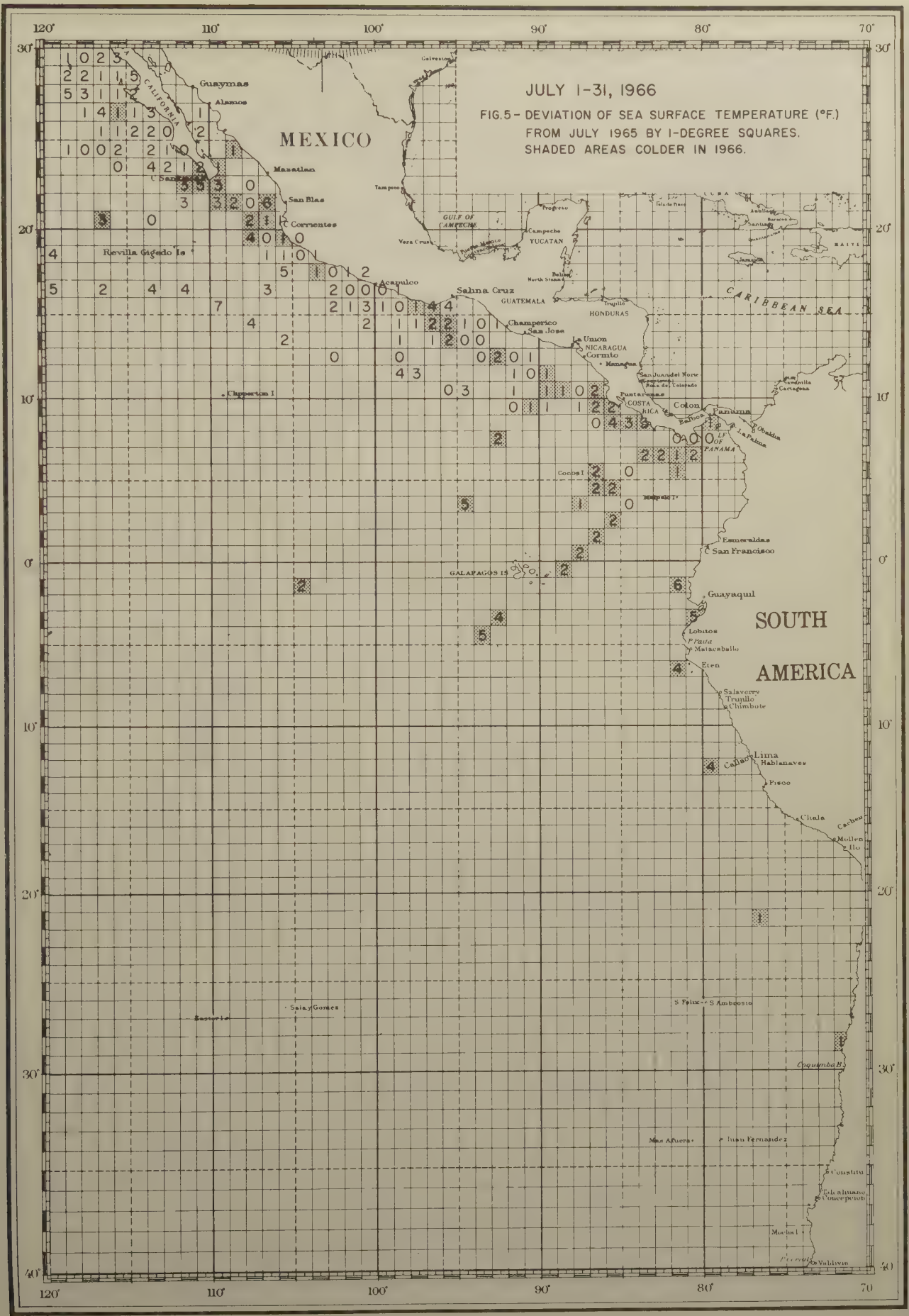
James A. Renner
Fishery Biologist (General)
August 4, 1966

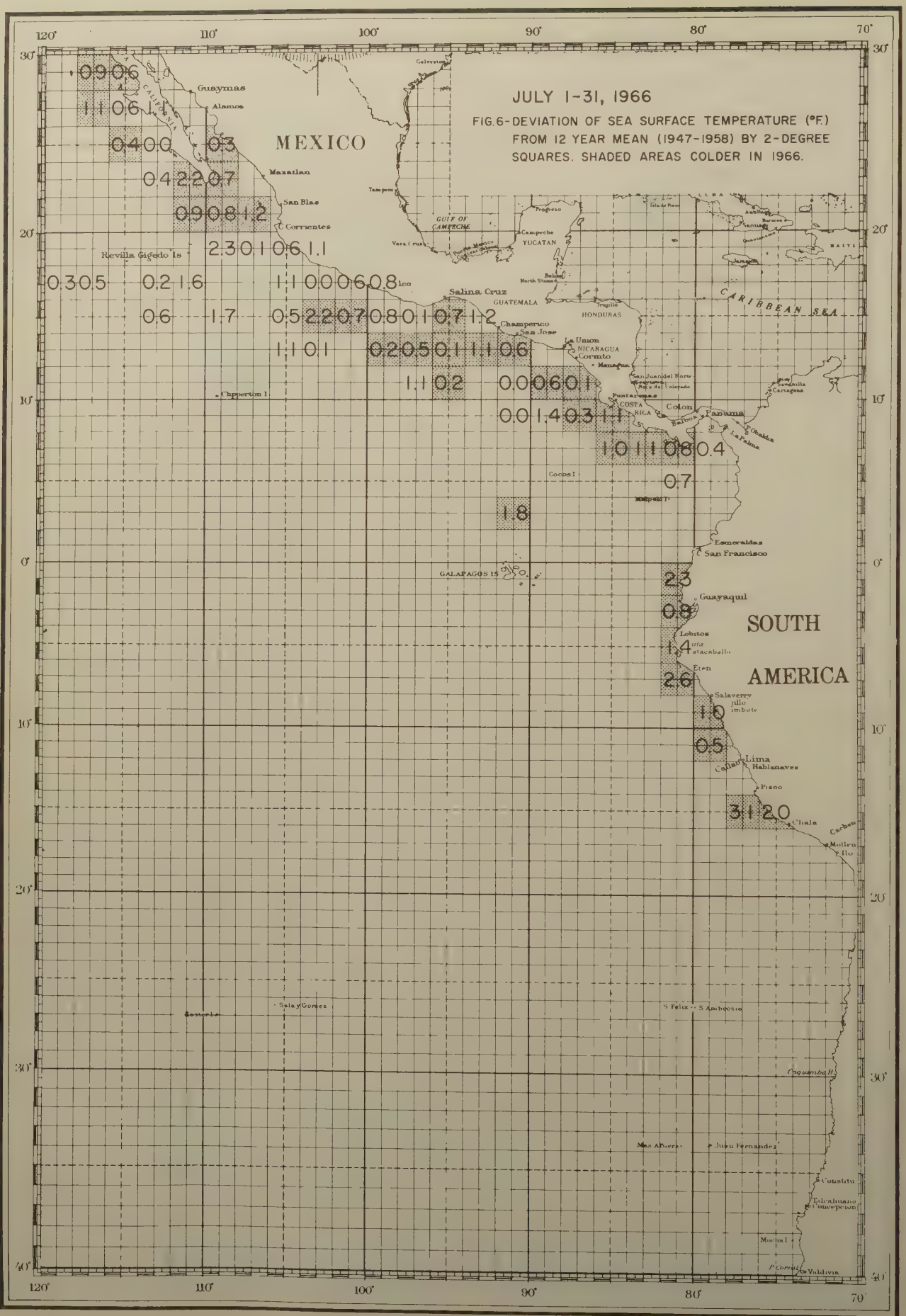

JULY 1-31, 1966
FIG. 1-MEAN SEA SURFACE TEMPERATURE (°F.)
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°

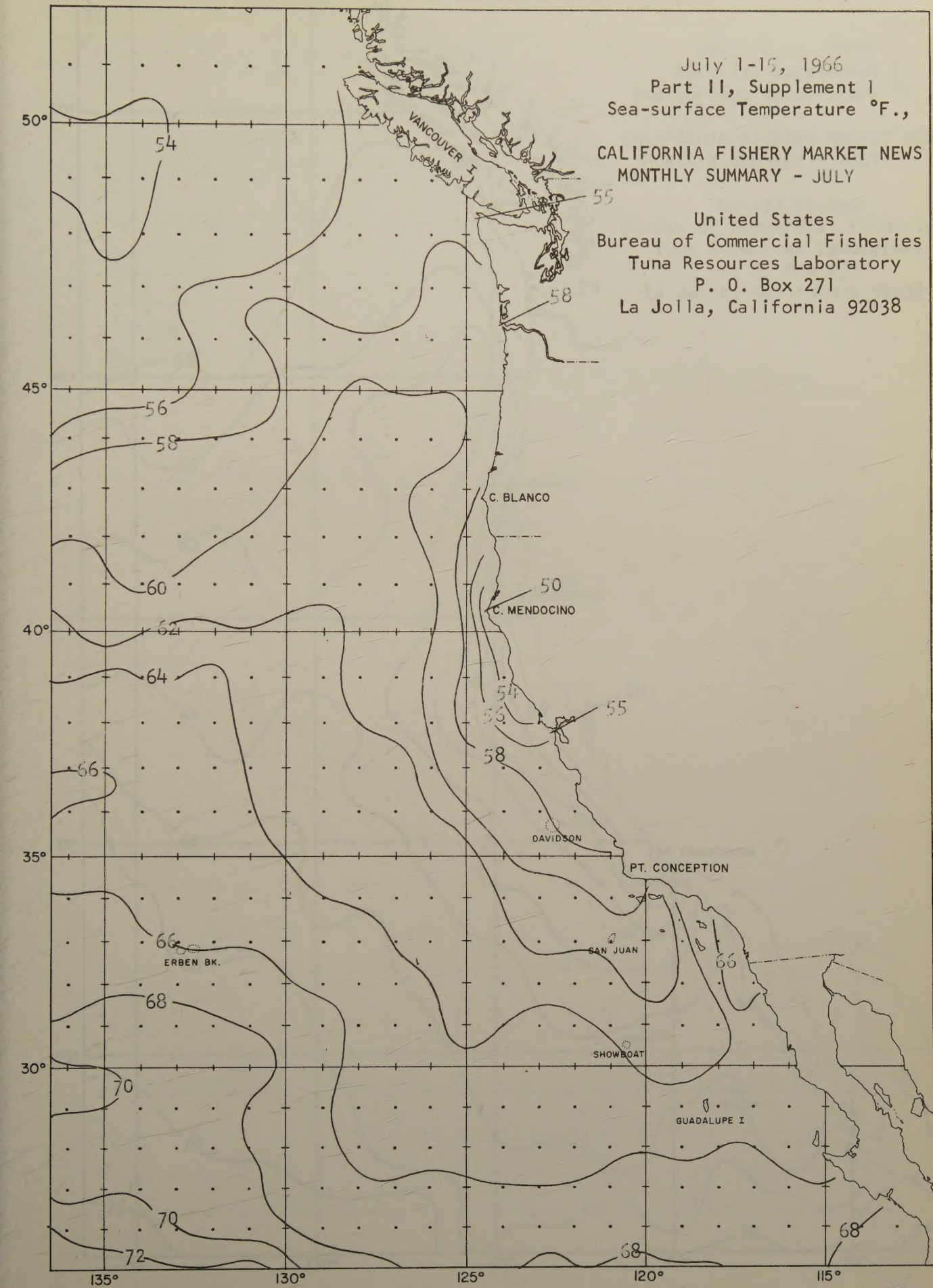

JULY 1-31, 1966
FIG.2-DEVIATION OF SEA SURFACE TEMP. (°F.) FROM LONG TERM MEAN. HATCHED AREAS COLDER IN 1966.
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°
0
2
4

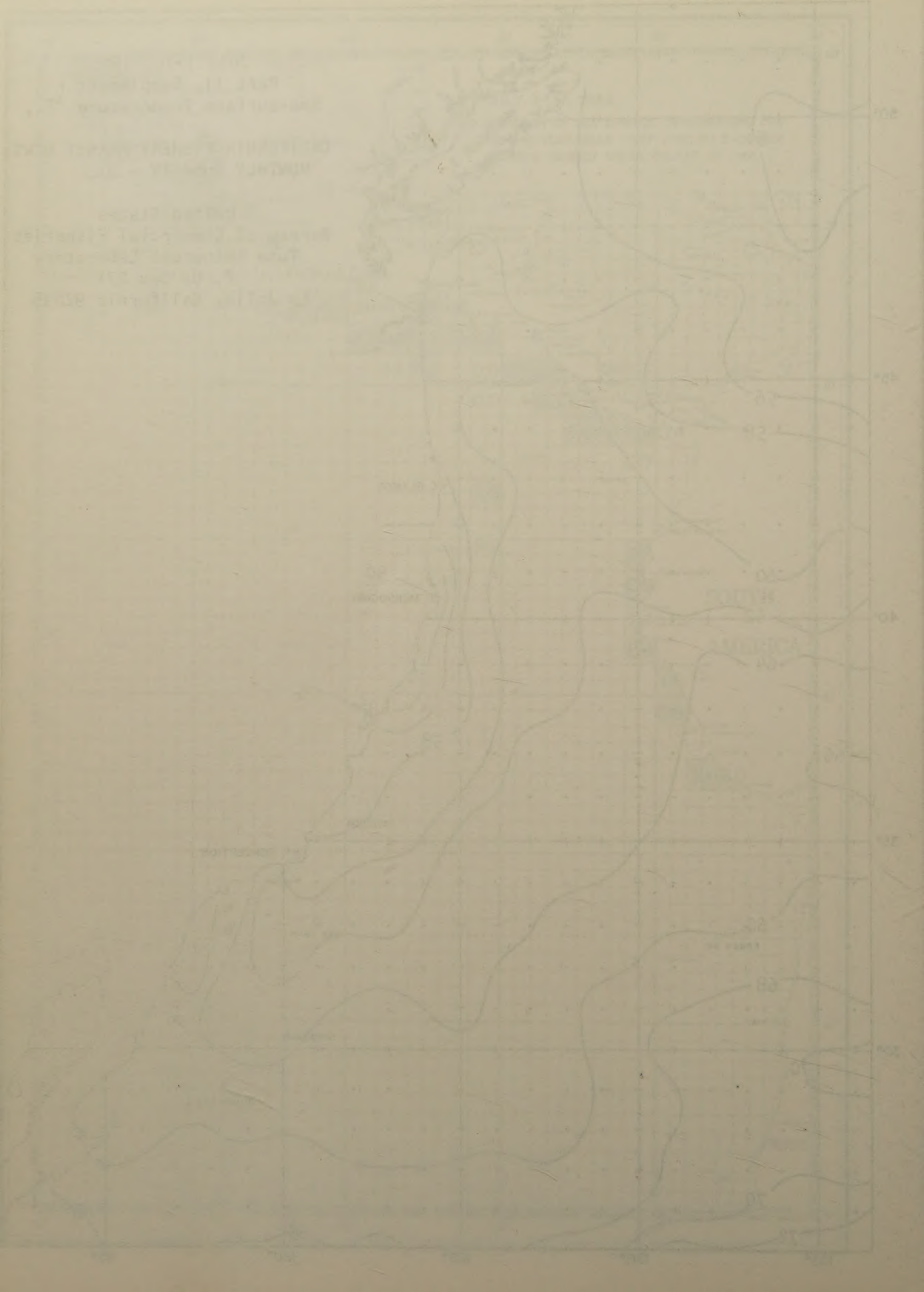

JULY 1-31, 1966
FIG.3-DEVIATION OF SEA SURFACE TEMP. (°F.) FROM JULY 1965. HATCHED AREAS COLDER IN 1966.
50°
40°
30°
20°
180°
170°
160°
150°
140°
130°
120°

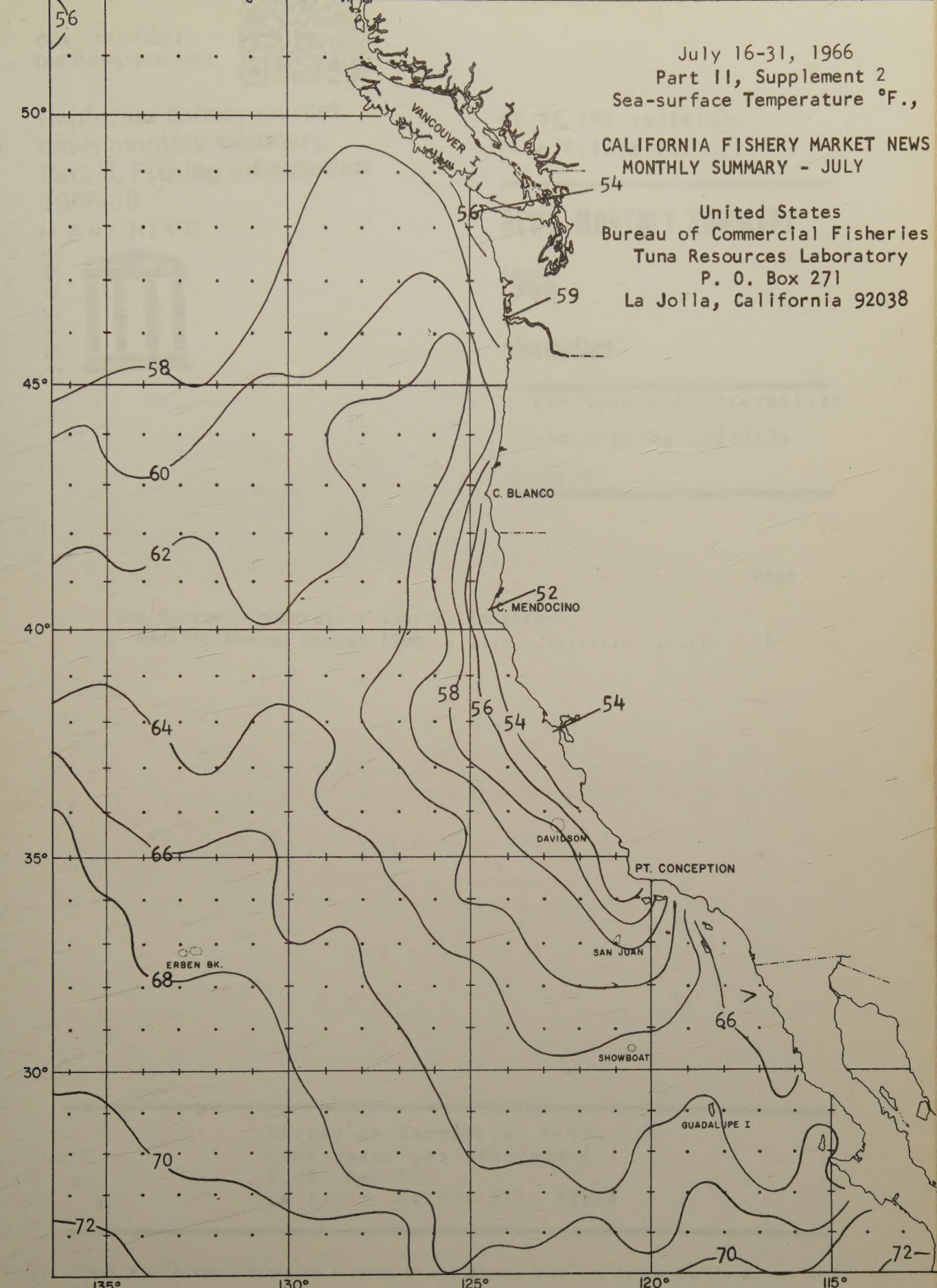

JULY 1-31, 1966
FIG. 4- SEA SURFACE TEMPERATURES (°F.)
BY 1-DEGREE SQUARES.
MEXICO
SOUTH
AMERICA
CARIBBEAN SEA
HAWAIIAN ISLANDS
PHOENIX ISLANDS
UNION ISLANDS
SAMOA ISLANDS
TONGA ISLANDS
COOK ISLANDS
MARQUESAS
TUAMOTU ARCHIPELAGO
SOCIETY ISLANDS
TUBUAI OR AUSTRALES
BERMADEC IS
GUATEMALA
HONDURAS
NICARAGUA
COSTA RICA
PANAMA
GALAPAGOS
Honolulu
Mazatlan
San Blas
Acapulco
Salina Cruz
Guayaquil
Tahiti
Rarotonga
Pisco
Iquique
Valparaiso


JULY 1-31, 1966
FIG.5 - DEVIATION OF SEA SURFACE TEMPERATURE (°F.) FROM JULY 1965 BY 1-DEGREE SQUARES. SHADED AREAS COLDER IN 1966.
MEXICO
SOUTH AMERICA
CARIBBEAN SEA
GULF OF CALIFORNIA
GULF OF CAMPECHE
GULF OF PANAMA
GALAPAGOS IS
Guaymas
Alamos
Mazatlan
San Blas
Corrientes
Revilla Gigedo Is
Acapulco
Salina Cruz
GUATEMALA
HONDURAS
Champerico
San Jose
La Union
NICARAGUA
Corinto
Managua
Chippertun I
COSTA RICA
Colon
Panama
Cocos I
Esmeraldas
San Francisco
Guayaquil
Lobitos
Talara
Eten
Salaverry
Trujillo
Chimbote
Lima
Callao
Hablanaves
Pisco
Chala
Caraveli
Mollendo
Ilo
Sala y Gomez
Easter I
S Felix
S Ambrosio
Juan Fernandez
Mas Afuera
Valdivia
Progreso
Campeche
YUCATAN
Vera Cruz
Tampico
Galveston
Belize
Trujillo
Puerto Limon
Cartagena
Barranquilla
Aruba
Curacao
Jamaica
HAITI
CUBA
Tela
Puerto Cortes
Roatan
Bocas
Chiriqui
Balboa
Chitre
La Palma
Malpelo I
Coquimbo
Constitu
Talcahuano
Concepcion
Mocha I


JULY 1-31, 1966
FIG.6-DEVIATION OF SEA SURFACE TEMPERATURE (°F.) FROM 12 YEAR MEAN (1947-1958) BY 2-DEGREE SQUARES. SHADED AREAS COLDER IN 1966.
MEXICO
SOUTH AMERICA
CARIBBEAN SEA
GULF OF CAMPECHE
GUATEMALA
HONDURAS
COSTA RICA
NICARAGUA
YUCATAN
GALAPAGOS IS
Guaymas
Alamos
Mazatlan
San Blas
Corrientes
Salina Cruz
Champerico
San Jose
Corinto
Managua
Panama
Colon
Esmeraldas
San Francisco
Guayaquil
Lobitos
Eten
Salaverry
Callao
Lima
Pisco
Chala
Caldera
Coquimbo
Juan Fernandez
Constitu
Talcahuano
Concepcion
Valdivia
Corral
Chippertim I
Cocos I
Malpelo I
Revilla Gigedo Is
Tampico
Progreso
Campeche
Vera Cruz
Galveston
Puerto Mexico
Coatzacoalcos
Tela de Paso
Trujillo
Roca de Colorado
Punta Arenas
Cartagena
Barranquilla
Buenaventura
Tumaco
Esteria
Salaverry
S Felix
S Ambosio
Mas Afuera
Mocha I
Isla de Pascua


July 1-15, 1966
Part II, Supplement 1
Sea-surface Temperature °F.,
CALIFORNIA FISHERY MARKET NEWS
MONTHLY SUMMARY - JULY
United States
Bureau of Commercial Fisheries
Tuna Resources Laboratory
P. O. Box 271
La Jolla, California 92038
VANCOUVER I.
C. BLANCO
C. MENDOCINO
DAVIDSON
PT. CONCEPTION
SAN JUAN
ERBEN BK.
SHOWBOAT
GUADALUPE I
50°
45°
40°
35°
30°
135°
130°
125°
120°
115°
54
55
58
56
58
60
50
52
64
54
55
55
58
66
66
66
68
70
70
72
68
68




July 16-31, 1966
Part II, Supplement 2
Sea-surface Temperature °F.,
CALIFORNIA FISHERY MARKET NEWS
MONTHLY SUMMARY - JULY
United States
Bureau of Commercial Fisheries
Tuna Resources Laboratory
P. O. Box 271
La Jolla, California 92038
VANCOUVER I.
C. BLANCO
C. MENDOCINO
DAVIDSON
PT. CONCEPTION
SAN JUAN
ERBEN BK.
SHOWBOAT
GUADALUPE I
56
54
56
59
58
60
62
52
58
56
54
54
64
66
68
66
70
72
70
72
50°
45°
40°
35°
30°
135°
130°
125°
120°
115°